

CLAIMS

1. A holder unit comprising: a base; a working tool holder which is movably supported on said base so that a working tool to be mounted can be disposed at a nonworking position and a working position; and resilient means for resiliently urging said working tool holder so as to dispose the working tool at the nonworking position, wherein said working tool holder is provided with a through hole having one end open at one end surface of said working tool holder and another end open at another end surface of said working tool holder, and said resilient means includes a resilient body disposed between the one end and the other end of the through hole, a resiliency receiving body which is detachably fixed to said working tool holder at one end side of the through hole and receives the resiliency of said resilient body, and an abutment body which is movably disposed in said working tool holder at another end side of the through hole, and which is adapted to abut against said base by the resiliency from said resilient body.
2. The holder unit according to claim 1, wherein said resiliency receiving body has a threaded plug which is threadedly secured to said working tool holder at the one end of the through hole.
3. The holder unit according to claim 2, further comprising: a screw threadedly secured to said working tool holder so as to prevent said threaded plug from coming off the one end of the through hole.
4. The holder unit according to claim 1, wherein said resiliency receiving body has a closure plate attached to the one end face of said working tool holder by means of a screw so as to close the one end of the through hole.
5. The holder unit according to any one of claims 1 to 4, wherein said abutment

body has a cylindrical body or a hollow cylindrical body which is movably disposed in said working tool holder at the other end side of the through hole and a sliding body which is integrally provided on said cylindrical body or said hollow cylindrical body and slidably abuts against said base.

6. The holder unit according to any one of claims 1 to 4, wherein said abutment body has a cylindrical body or a hollow cylindrical body which is movably disposed in said working tool holder at the other end side of the through hole and a rotating body which is rotatably held by said cylindrical body or said hollow cylindrical body and rolls on and abuts against said base.

7. The holder unit according to claim 6, wherein said rotating body is constituted by a spherical body or a roller which is rotatably held by said cylindrical body or said hollow cylindrical body.

8. The holder unit according to any one of claims 1 to 7, wherein said working tool holder includes a holder body which has the through hole and is rotatably supported on said base by means of a shaft member, and a cam roller attached to said holder body so as to abut against a cam driver.

9. The holder unit according to any one of claims 1 to 7, wherein said working tool holder includes a holder body which has the through hole and is supported on said base in such a manner as to be movable in parallel by means of a pair of parallel link members, and one of said pair of parallel link members has a link body and a cam roller attached to said link body so as to abut against a cam driver.

10. The holder unit according to claim 9, wherein said base, said link body, and another one of said pair of parallel link members, and said holder body constitute a parallel link mechanism.

11. The holder unit according to any one of claims 1 to 7, wherein said working

tool holder has the through hole and is supported on said base rotatably and movably in parallel by means of a coupling column member and a pair of parallel link members, said coupling column member being rotatably coupled to said base by means of a shaft member, each of said pair of parallel link members being rotatably coupled to respective ones of said working tool holder and said coupling column member, respective ones of said coupling column member and one of said pair of parallel link members having cam rollers which respectively abut against cam drivers.

12. The holder unit according to claim 11, wherein said working tool holder, said coupling column member, and said pair of parallel link members constitute a parallel link mechanism.

13. The holder unit according to claim 11 or 12, further comprising a transmitting body interposed between said working tool holder and said coupling column member so as to transmit to said working tool holder the rotation of said coupling column member for disposing the working tool at the working position and to transmit to said coupling column member the rotation of said working tool holder by said resilient means for disposing the working tool to the nonworking position.

14. The holder unit according to claim 13, wherein said transmitting body is secured to said coupling column member and slidably abuts against said working tool holder.

15. The holder unit according to any one of claims 1 to 14, wherein said resilient body has at least one of a coil spring, urethane rubber, and a gas spring.

16. The holder unit according to any one of claims 1 to 14, wherein said resilient body has a coil spring.

17. A hemming apparatus comprising the holder unit according to any one of claims 1 to 16.